Roadmap of measures for indirect involvement of visitors and tourists, including disabled people, in the management of protected areas

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Cover image: The Dune of Preila, Neringa, Lithuania (Credit: Daumantas Bočkus)

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Executive Summary

Protected areas across Europe increasingly recognize that long-term conservation success cannot rely solely on top-down management. Instead, effective stewardship depends on inclusive, structured, and continuous involvement of visitors in shaping how these landscapes are protected, maintained, and experienced. This roadmap provides practical guidance for protected area managers on how to develop and implement indirect visitor involvement, including people with disabilities, ensuring that input from diverse user groups effectively supports conservation, recreation options, and accessibility goals.

Rooted in international frameworks, such as IUCN principles of inclusive governance, the UN Convention on the Rights of Persons with Disabilities, and adaptive management approaches, the roadmap outlines why visitors are essential partners and how their lived experience, observations, and motivations can enhance management effectiveness. Visitors contribute critical information about environmental conditions, accessibility barriers, wildlife observations, and visitor impacts. When engaged consistently, they become advocates, co-creators, and responsible users, strengthening the social legitimacy of management decisions.

The roadmap presents a clear set of practical steps to help protected areas prepare for, implement, and evaluate visitor engagement. It emphasizes organizational readiness, staff capacity, and accessibility integration from the earliest planning stages. The *Visitor involvement cycle* outlines eight sequential steps – from defining purpose and identifying visitor groups to analyzing input, communicating outcomes, and evaluating long-term effectiveness. The roadmap introduces a range of practical tools and methods that protected area managers can apply, including surveys, participatory mapping, citizen science initiatives, advisory groups, digital engagement platforms, guided walk-and-talk sessions, and partnerships with tourism providers, NGOs, and disability organizations to support meaningful and inclusive visitor involvement.

Visitors with disabilities are recognized not only as an important user group but also as experts by experience whose insights lead to more accessible and equitable protected areas. Universal design, readiness checklists, flexible engagement formats, and targeted outreach support participation from groups often underrepresented in conservation and recreation dialogue, such as youth, families, older adults, minorities, and people with diverse physical, sensory, or cognitive needs.

The case studies from the UK, Finland, the USA, Croatia, and South Africa show that inclusive visitor engagement leads to stronger conservation outcomes and better visitor experiences. Overall, this roadmap provides a practical and adaptable guide for protected areas seeking to integrate visitor perspectives into daily operations and long-term planning. By embracing visitor involvement as a core management function, protected areas can enhance

decision-making, build shared stewardship, and ensure that nature remains accessible and protected for future generations.

1. INTRODUCTION

1.1 Purpose of the roadmap

Over the past few decades, the management of protected areas has gradually shifted away from strictly centralized, top-down models toward more participatory and partnership-oriented approaches. Earlier, prioritization was primarily put on conservation or carefully controlled visitor experiences, where stakeholders were given only limited opportunities to contribute. However, there is growing recognition that long-term conservation and development success depends on cooperation with different groups of stakeholders who have an interest in these areas. This inclusive governance approach includes shared responsibility and openness, enabling the involvement of visitors, including people with disabilities, as active contributors to the protection and improvement of protected areas.

This roadmap offers practical guidance for protected area managers on involving visitors and tourists in management processes through indirect forms of participation. It places particular emphasis on inclusive approaches to ensure that all visitors, including people with disabilities, have meaningful opportunities to contribute. The purpose is not to shift formal management duties to visitors, but to provide clear and effective pathways through which visitors' observations, feedback, and other forms of support can strengthen existing management systems.

Specifically, the roadmap aims to:

- Provide protected area managers with a practical, step-by-step framework for planning, implementing, and evaluating indirect visitor involvement in everyday management and long-term planning
- Support the systematic integration of visitor knowledge, observations, and feedback (e.g., on accessibility, infrastructure, environmental conditions, and visitor experience) into adaptive management processes
- Strengthen inclusive governance by ensuring that participation opportunities are accessible to diverse visitor groups, including people with physical, sensory, cognitive, and invisible disabilities
- Promote the application of universal design and accessibility principles across visitor engagement methods, communication tools, and physical environments
- Foster a culture of shared stewardship and responsibility, where visitors are recognized as contributors, not only as users, strengthening trust, compliance, and conservation outcomes

By following this roadmap, protected area managers can engage visitors as active partners in conservation, making use of their experiences and observations as valuable input for effective, inclusive, and sustainable management. It will contribute to the creation of an environment where visitor presence supports both the integrity of protected areas and the overall quality of visitor experiences.

1.2 Scope and intended audience of the roadmap

This roadmap is applicable to a wide range of protected areas, from large national parks to smaller regional protected areas, allowing its guidance to be adapted to diverse ecological, cultural, and social contexts. It is designed to address both daily management needs and long-term strategies for engaging visitors in ways that are aligned with conservation goals, inclusive, and sustainable.

Primary target audience:

- ***Protected area managers and staff:*** As the primary implementers, they can apply the roadmap to design visitor engagement systems, adapt them to local conditions, and integrate visitor input into management decisions

Secondary target audience:

- Tourism operators: Guides, tour companies, and hospitality providers influence visitor behaviour and experiences. Although the roadmap is primarily designed for protected area managers, it offers principles and examples that tourism operators can use to support sustainable tourism and improve accessibility for diverse visitor groups, including people with disabilities
- NGOs and organisations supporting visitor engagement: Conservation groups, accessibility advocates, and community organisations can draw on the roadmap's guidance to design programmes, provide technical support, and build stronger partnerships between visitors and protected area authorities
- Policy makers responsible for protected area governance: Decision-makers at national and local levels may find the roadmap a useful reference when developing policies, regulations, or funding priorities related to visitor involvement and accessibility, even though detailed legislative guidance lies beyond its scope

In addition, the roadmap may be helpful for educational institutions and local communities interested in promoting awareness, learning, and shared stewardship of natural and cultural heritage.

1.3 Rationale for visitor involvement

Visitors serve as a valuable yet frequently underutilized resource in protected area management. Their indirect engagement can produce benefits that go beyond conventional management strategies, positively impacting both ecological objectives and social well-being.

The guidelines presented in this roadmap align with the IUCN's international guidance on protected-area governance (Worboys et al., 2015), which stresses that successful management depends on inclusive, fair, and transparent participation. Involving visitors and people with disabilities in decision-making reflects these global standards by linking conservation needs with social inclusion and shared responsibility.

Benefits of visitor involvement:

- Provision of real-time information, such as wildlife observations, environmental conditions, trail usage, litter, and general visitor experiences. This input complements formal monitoring efforts and strengthens adaptive management
- Improved compliance with conservation rules, as participatory approaches foster a sense of ownership and encourage responsible behavior, reducing reliance on enforcement alone.
- Increasing public awareness and support for protected area objectives, as engaged visitors become advocates for conservation in their communities and networks
- Enhancing management decision-making by providing diverse perspectives and firsthand observations that can highlight emerging threats or opportunities
- Fostering stronger long-term engagement and partnerships by building ongoing relationships with stakeholders. This approach creates a space for open communication where managers and practitioners can share ideas, identify challenges, and collaboratively develop solutions. Ultimately, this deepens understanding and support for the protected area

1.4 How to use this roadmap

This roadmap is meant to serve as a flexible guide rather than a rigid set of instructions. Protected area managers and their partners are advised to:

- Adapt the guidance to the specific ecological, cultural, and social contexts in their respective protected areas
- Prioritize inclusivity and accessibility when applying recommended measures, providing opportunities to people of all abilities and backgrounds
- Involve visitors in the planning process as early as possible
- Use regular monitoring and recommended indicators to track progress and assess effectiveness

By applying these principles, managers can ensure that the roadmap supports practical, participatory, and sustainable improvements in their protected area management.

Structural notes for using this roadmap:

To support practical application, the roadmap is organized into thematic sections that move from conceptual background to step-by-step guidance. Users may consult the entire document or focus on the sections most relevant to their management context.

- Start with the overview (Sections 1 and 2) to understand the rationale, principles, and key concepts that underpin visitor involvement
- Use the thematic implementation-focused chapters (Sections 3–4) as operational guidance, selecting the measures that best match the needs and priorities of the protected area
- Refer to the examples of good practices (Section 5) for illustrated cases that demonstrate how visitor involvement can be successfully integrated into protected area management
- Use the provided tables and templates as practical tools for implementation, customizing them to local needs
- Consult definitions and terminology to ensure consistent use of key concepts across teams and partners

1.5 Key concepts and definitions

Understanding the key terminology used in this roadmap is essential for ensuring clarity, consistency, and a shared foundation among protected area managers and visitors. The concepts below reflect internationally recognized standards in conservation, accessibility, and visitor involvement, and they provide the basis for interpreting the approaches and recommendations presented throughout this roadmap.

Protected area

According to the IUCN, a protected area is “a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values” (Dudley, 2013). Protected areas include national parks, nature reserves, Natura 2000 sites, and other conservation spaces whose primary purpose is ecological protection. They also provide recreational, educational, and tourism opportunities and increasingly depend on visitor involvement to support conservation and accessibility goals.

Citizen science

Citizen science is a collaborative research method and innovative engagement tool that involves visitors, scientists, and protected area managers in the scientific process, helping managers address monitoring needs and management challenges (Cheung et al., 2022). In protected areas, citizen

science may include wildlife counts, pollution monitoring, mapping trails, reporting accessibility barriers, or contributing to databases that inform adaptive management.

Co-creation

Knowledge co-creation can be defined as "iterative and collaborative processes involving diverse types of expertise, knowledge and actors to produce context-specific knowledge and pathways towards a sustainable future" (Norström et al., 2020, p2). For protected areas, co-creation means visitors, communities, and disability groups collaborate with managers to design trail systems, signage, accessible facilities, or engagement tools based on shared expertise, ensuring shared ownership and more effective management outcomes.

Inclusive governance

Inclusive governance implies that "all people – including the poor, women, ethnic and religious minorities, indigenous peoples and other disadvantaged groups – have the right to participate meaningfully in governance processes and influence decisions that affect them" (UNDP, 2007). In the context of protected areas, it means that management decisions are shaped not only by authorities and experts but also by the people who use, value, and experience these landscapes.

Universal design

The 2006 UN Convention on the Rights of Persons with Disabilities, Article 2, describes universal design as the "design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design". In protected areas, universal design influences the development of accessible trails, maps, signage, visitor centres, digital tools, and engagement opportunities that can be used by the widest range of visitors without requiring later modifications. However, "universal design" should not exclude the use of assistive devices for certain groups of people with disabilities when necessary.

Adaptive management

Adaptive management in protected areas is a structured, iterative cycle of planning, acting, monitoring, and refining decisions based on new information (Stringer et al., 2006). It embodies a "learning by doing" approach that enables managers to adjust strategies over time in response to changing environmental or social conditions. When applied to visitor involvement, including input from people with disabilities, adaptive management enables protected areas to incorporate visitor-generated insights such as accessibility observations, trail conditions, and wildlife sightings into ongoing decision-making.

Accessibility

The UN defines accessibility as the obligation "to enable persons with disabilities to live independently and participate fully in all aspects of life" and to "take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications…". In protected areas,

accessibility includes physical (paths, viewing points), digital (websites, apps), communication (easy-to-read, Braille, captions), sensory accommodation (quiet areas), and procedural access (remote participation).

Visitor and tourist

As defined by UN Tourism, "visitor is a traveller taking a trip to a main destination outside his/her usual environment, for less than a year, for any main purpose (business, leisure or other personal purpose) other than to be employed by a resident entity in the country or place visited". According to UN Tourism a "visitor is classified as a tourist (or overnight visitor), if his/her trip includes an overnight stay, or as a same-day visitor (or excursionist) otherwise".

Note: In this roadmap, the term visitor is used as an inclusive term covering all temporary users of protected areas, including local visitors, one-day visitors, and domestic or international tourists

2. VISITOR INVOLVEMENT

Successful protected area management depends on building mutual trust and long-term relationships with people and organizations that care about or influence the area. When managers and stakeholders work together with commitment and openness, they create partnerships that last and deliver real value for both sides (Harrison & Wicks, 2013).

Visitor engagement refers to the practical steps an organization takes to involve others in a positive way in its activities. In the context of protected areas, this includes open communication, collaboration, dialogue, and shared decision-making. Effective engagement means understanding what different stakeholders value and what they can contribute.

Stakeholders include anyone who can affect or be affected by what happens in a protected area. Besides visitors, this broad category includes local communities, NGOs, tourism operators, government institutions, and researchers. Visitors are considered a key stakeholder group whose experiences and perspectives add important value to management processes. Their relationship with park managers should go beyond simple information exchange or transactional interactions. The goal is to create value together – for nature, visitors, and local communities.

Visitors' knowledge, experiences, and expectations can provide park managers with a broader understanding of their needs, which can then be translated into more practical and workable solutions. This collaborative approach can also help transform potential conflicts into cooperation and strengthen stakeholders' commitment to conservation goals.

It is important to remember that engagement alone does not automatically ensure responsible or fair treatment of stakeholders (Newig et al., 2023). Managers need to make sure all groups, including those often less visible, such as people with disabilities, are genuinely included. True engagement happens when everyone has a voice and can see that their input makes a difference.

2.1 Overview of potential stakeholders

Due to varying perspectives, interests, and levels of expertise, a range of different stakeholder groups are commonly involved in the management of protected areas. This approach allows to achieve long-term conservation success and secure a broad community support.

- Protected area managers and staff handle daily operations, implement policies, and carry out conservation efforts, ensuring the area's protection and functionality
- Local communities living in or near protected areas are often dependent on the land for cultural and economic purposes. They contribute with valuable traditional knowledge, and place-based understanding. The IUCN has long emphasized the importance of involving

communities at every stage of planning and management (Borrini-Feyerabend et al., 2013; Worboys et al., 2015)

- Visitors and tourists influence how protected areas are used and maintained through their recreational, educational, and tourism activities
- Non-governmental organizations (NGOs) whose work is connected to conservation, accessibility, or community issues often contribute with technical expertise, capacity building, and their outreach potential.
- Government agencies at local, regional, or national levels provide regulatory oversight, funding, and policy guidance, helping to ensure coordination and consistency across institutions
- Private sector partners, including tourism operators and local businesses, contribute economic value and can help promote responsible tourism practices that support conservation objectives
- Researchers and academics offer data and evidence to inform adaptive management and long-term monitoring
- Volunteers and advocacy groups contribute time, resources, and public support, helping to raise awareness and promote stewardship

According to ECEAT International and EUROPARC (2010), successful management requires dialogue between each group as they share different forms of knowledge. At the same time, managers should recognize that stakeholders may hold diverse and at times conflicting interests and values. Achieving consensus requires active engagement with open dialogue and a willingness to balance differing perspectives and needs. Management plans would often lack acceptance from the stakeholders if they were not meaningfully involved. True ownership and support comes only through participation process (Loos et al., 2022).

This roadmap specifically focuses on the involvement of visitors and tourists, including people with disabilities, in the management of protected areas. By actively involving people with disabilities, managers can ensure these environments are physically accessible and socially welcoming for everyone. When visitors are meaningfully included, they are more likely to become conservation advocates rather than passive users, reflecting global best practices that promote transparent communication, shared learning, and collaboration between site managers and protected area users.

2.2 Principles of visitor group identification

Identification of different visitor groups that affect or may be affected by how the area is managed is one of the key steps in protected area management. Effective identification ensures that each important voice is taken into account, especially considering groups that are often underrepresented in management processes. This approach is aligned with IUCN's principles for

stakeholder participation and the Aarhus Convention (Borrini-Feyerabend et al., 2013; UNECE, 1998).

1. Understand relationships with the protected area

Start by mapping how different groups of people interact with the area. It should be considered who uses it, benefits from it, or may be impacted by its management decisions. For example, visitors and tourists, including those with disabilities, may experience the area in different ways, for example, through recreation, education, cultural connection, or simply appreciation of nature. If managers understand these relationships, it helps to identify both opportunities for visitor engagement and knowledge about potential conflicts of interest.

2. Recognize roles, interests, and capacities

Every group of visitors may contribute in a different way. For example, local communities may share their local traditional knowledge or help monitor wildlife. Visitors with disabilities may help to understand the existence of accessibility barriers and suggest important practical improvements. With this knowledge, managers can match engagement methods to each group's strengths and interests.

3. Consider how management actions affect visitors

When a protected area manager implements changes in visitor infrastructure, accessibility, or rules, it can have different effects on each visitor group. For example, certain restrictions may have an impact on opportunities to conduct business for locals. On the other hand, improved pedestrian paths can expand accessibility for people with mobility limitations. Therefore, in order for management actions to be equitable and inclusive, it is important to assess such impacts in advance.

4. Ensure diversity and representation

Visitors are not a single, homogenous group, as there will be a range of perspectives shaped by different variables such as age, gender, physical ability, or cultural background. Therefore, it is important to recognize this diversity during the visitor identification process and ensure representation of relevant groups, including those whose needs and voices are less often heard.

5. Engage early and maintain communication

The visitor identification process begins with identifying all affected and interested parties, but it also involves maintaining open channels for dialogue as management progresses, as it is not a one-time exercise (Thomas & Middleton, 2003). During this process, new groups of visitors may emerge, and others may become less active or their needs may change.

To sustain engagement over time, continuous communication, transparency, and provision of feedback remain essential, as they build trust and help prevent misunderstandings later in the process. To visualize levels of influence and interest, managers may prepare a simple visor group map or matrix**.** Consultation tools and communication materials should be accessible to different

visitor groups, for example, by using multiple formats or languages to include people with diverse abilities and backgrounds.

Applying these principles allows managers to understand who their stakeholders are, how they relate to the protected area, and what the motivations are for their participation, leading to improved management. To finalize, people who are affected by a decision should have the opportunity to be involved in decision-making.

2.3 Types of visitor involvement

Visitors' participation can be understood as a continuum, where at one end, there is simply the provision of information, whereas at the other end, protected area managers provide active support for independent or delegated initiatives. Moving from one end to another, there is a gradual increase in collaboration, shared responsibility, and influence. In order to design more effective and realistic processes, managers need to understand where an engagement activity is situated in this spectrum.

This section draws on the **IAP2 Spectrum of Public Participation** model, which is widely used in environmental governance. The spectrum outlines a continuum of engagement and specific "promise to stakeholder" – *Inform* → *Consult* → *Involve* → *Collaborate* → *Empower* – showing the increase of stakeholder influence as the participation deepens. According to this framework, an appropriate level of engagement depends on context, resources, and purpose rather than simply stating that more participation is always an advantage.

Figure 1 presents an adapted version of "Spectrum of Public Participation", used here to illustrate levels of visitor involvement. It was developed by the International Association of Public Participation [IAP2] (2007). and can be used as a quick reference to check whether participation is genuine and fair.

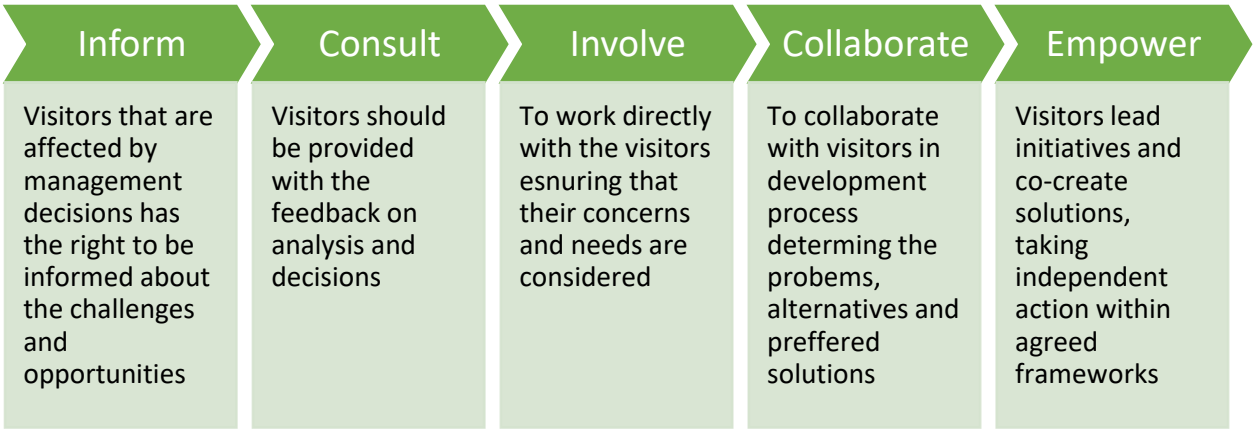

Figure 1. Visitor participation spectrum. Adapted from the IAP2 "Spectrum of Public Participation"

The most effective engagement strategy often combines several levels of involvement. It depends on the issue, the capacities of the different groups of visitors, and available resources. To ensure effective participation, visitor input should actually influence the outcome rather than be limited to providing opinions. Visitors should be aware of what kind of involvement is expected from them and how their involvement will contribute to the final decisions. This logic helps managers to build trust and avoid disappointment later.

1. Informing

Protected area managers should give visitors accurate, timely information about the area's management goals and plans. This increases awareness and transparency, encourages compliance with conservation regulations, and clarifies engagement opportunities.

Information should be shared through visitor centers, park websites, newsletters, social media, and annual reports. Information boards, including those in multiple languages or Braille, are also considered effective methods for the provision of information. Communication must be clear, non-technical, and available in various formats, such as online, print, visual, or oral, to reach diverse audiences. Visitors should have easy access to contact information for clarification. These measures reduce misunderstandings and build trust, increasing the likelihood of deeper engagement over time.

2. Consulting

During this step, visitors, including people with disabilities, are invited to share their views, experiences, and concerns. Consultations strengthen the legitimacy and support for management actions. There are various options to organize consultations, including workshops, public meetings, surveys, or through the use of mobile apps or website links, where visitors can report on specific challenges in the area and suggest their improvements. Those consultations should be organized as early as possible, as it sends the message to visitors that their opinions matter and that they can influence the decision.

3. Involving

Management authorities are responsible for the final decisions. However, different groups of visitors, when familiarized with the background information, may contribute by helping to analyze the problems and options for solving them, and by having their say in reaching decisions. Therefore, visitors representing different interests should be included in advisory boards or working groups. This fosters a sense of partnership and ensures increased acceptance, as the decisions are shaped collectively. Naturally, protected areas also benefit from a combination of local knowledge and their own expertise on the matter.

4. Collaborating

Here, visitors and managers work side by side to implement agreed activities. This can include: citizen-science programmes where visitors collect wildlife or pollution data, volunteering for trail maintenance or environmental restoration; joint accessibility audits led by user groups with disabilities; and different types of educational events promoting sustainability. Training and equipment should be provided when needed. Additionally, public recognition through certificates enhances participant acknowledgment and promotes this good practice.

5. Empowering

The highest level of involvement is when protected area managers can support and empower different groups of visitors to take independent action that contributes to conservation, accessibility, and sustainable tourism objectives. The aim is to encourage local leadership and to become co-creators of solutions in managing and promoting protected areas. At this level, under established frameworks, visitors or volunteer groups may independently maintain the paths or ensure the protection of dunes, organize various campaigns promoting sustainable transportation options, biodiversity preservation, and other initiatives. Management authorities in this case act as mentors and enablers instead of direct implementers.

Selecting and combining approaches

Every situation may require a different level of involvement. Managers should select the most suitable level of involvement based on:

- The importance and complexity of the issue
- The potential impact of the planned actions on different groups of visitors
- Availability of resources and time.

It's important that the invitation to provide input entails the intention to include visitors' suggestions in the final solutions. Visitor engagement should never be symbolic or treated as a mere "tick-box" activity, as it can damage the trust of the management. The quality and influence of the participation is more important than the quantity or intensity. Thoughtful and well-designed participation that leads to visible influence is more valuable than numerous disconnected activities.

The IAP2 framework reminds practitioners that the goal is not to "climb the ladder" of participation but to choose the right level for the context. A balanced approach may combine several levels. For example, broad "Informing" may be appropriate for routine updates, while levels connected to joint decisions and actions may be needed for significant regulations and infrastructure changes. Managers need the flexibility to adjust their engagement level accordingly. Sometimes the work on some specific challenge may start with information sharing and later involve visitors more actively. In other cases, managers may shift from consultation to

collaboration as relationships develop. For example, informing the general public, consulting on significant decisions, and acting together with motivated partners. It is important to ensure that people of all abilities and backgrounds can participate regardless of the level of engagement.

Checklist for meaningful engagement

Table 1. Checklist before the start of any participation process

☐	Have we clearly defined the reasons we seek engagement and what decisions can be influenced by the participant?
☐	Do our visitors understand which level of participation we offer to them (e.g., consult, collaborate)?
☐	Has our institution allocated enough time, and do we have the resources to respond to visitor input?
☐	Are our prepared engagement tools and materials accessible to people with different abilities and backgrounds?
☐	Are we prepared to communicate back and provide feedback on how their input affected the decisions?
☐	Do we have a plan to maintain dialogue and evaluate the achieved results after the implementation of actions?

Section 3, "Practical implementation of visitor involvement", provides a step-by-step process explaining how visitor involvement principles can be applied in practice.

2.4 Roles and contributions of visitors

Protected areas are characterized as dynamic spaces, which are shaped not only by ecological processes but also by human interaction. Visitors, including people with disabilities, play an important role in how these areas are experienced and managed. Their actions and presence have an influence on both daily maintenance and long-term conservation and accessibility outcomes.

For many years, practitioners and scholars viewed visitors primarily as beneficiaries or even as sources of negative impact that requires active management. However, currently, visitors are increasingly seen as contributors and partners, as their observations and participation in various educational and community-based activities may increase the quality of management. Although their involvement is usually *indirect* and they do not replace formal management structures, with proper guidance and support, their participation may have a significant impact.

In the European context, protected areas serve multiple purposes, including biodiversity conservation, recreation, cultural heritage preservation, and education, which makes visitor involvement even more valuable. The lived experience and expertise of people with disabilities

ensure that protected areas are accessible, inclusive, and responsive to everyone's needs. Engaging this group fulfills legal and ethical obligations, and in line with the principles of universal design, it also enhances quality and usability for all visitors.

Visitors' behavior influences environmental impact, financial sustainability of the area, and community relations. It makes them the most visible stakeholders in the protected area. Visitors are often considered as **observers, informants, volunteers, digital ambassadors, and co-creators of value,** rather than just passive consumers of services. Visitor engagement enhances management effectiveness and may also boost public support for protected areas' management plans.

1. Observers and informants

Visitors observe the environment while visiting sites and can help identify local conditions and visitor needs in real time: damaged facilities, litter, wildlife, or barriers to accessibility. Information can be collected through visitor surveys, feedback programs, online reviews, and other methods. For example, simple mechanisms such as QR-coded feedback forms may encourage visitors to share their quick observations, which the management team can use for maintenance planning or adaptive decision-making.

2. Volunteers and citizen scientists

Visitors often have a motivation to contribute with their own time and expertise when they are given clear and meaningful opportunities. This type of participation fosters a sense of shared responsibility, ownership, and emotional connection to the area.

Examples of participation may include:

- Counting birds or some other species of animals
- Detection of pollution
- Clean-up and maintenance activities
- Mapping sites

3. Responsible users and role models

In order to preserve protected areas, visitors are expected to follow simple rules, such as staying on marked trails, respecting wildlife, and disposing of waste properly. When such behavior is visible to the public, it sets an example for other visitors and helps to foster a culture of responsible behavior.

4. Digital ambassadors

Content and experiences shared by visitors on social media, travel platforms, or community networks can have both positive and negative effects. This can reinforce knowledge about

sustainable behavior or spread misinformation. It is recommended that protected area managers disseminate ready-to-share messages, hashtags, and images to visitors to encourage them to promote sustainability and accessibility and become positive ambassadors of the area.

5. Co-creators of value

Visitors can be invited to co-design certain parts of strategies or foresee protected area activities through participatory workshops and sessions. Insights from families, elderly visitors, or people with mobility restrictions can reveal hidden barriers or needed improvements that managers might otherwise overlook.

2.5 Roles and contributions of visitors with disabilities

Involvement of people with disabilities ensures that protected areas are accessible, equitable, and inclusive, and is in line with the UN (2006) *Convention on the Rights of Persons with Disabilities*. Despite being an integral part of the visitor community, this group is often underrepresented in participation processes

Disabilities encompass a wide and diverse range of conditions, including *physical, sensory, cognitive, communication, developmental, mental health, and emotional or behavioural disabilities*. Often, people are affected by a combination of these factors, which impact their ability to move, sense, learn, and interact with the environment. Not all of the disabilities are visible. For example, chronic pain or mental health challenges are not immediately apparent.

Because of the diversity of the types of disabilities, each person's needs are shaped by their own abilities, and the context in which they experience the area. Therefore, there is a need for an inclusive engagement in protected areas, which requires *targeted adaptations* to meet the needs of specific groups. Universal design principles ensure that areas are usable by as many people as possible, but they should be applied in conjunction with customized solutions developed in collaboration with disability organizations.

Disabilities impact more than just physical accessibility, as they influence how individuals communicate, process information, and engage socially. Therefore, managers and staff should integrate accessibility into every aspect of their work, including covering infrastructure, signage, digital tools, interpretation, and training.

The UN *Convention on the Rights of Persons with Disabilities* and national laws mandate equal access in most countries. However, embracing inclusive practices should be considered more than a legal requirement, but also a way to demonstrate fairness and a commitment to social inclusion.

How people with disabilities can contribute to the planning and implementation process

People with disabilities and the organizations that represent them can provide valuable insights and knowledge to identify barriers in specific areas, ensuring that planned improvements will work in practice. Protected area managers should treat this group as partners and experts, rather than just as beneficiaries of inclusive management. Their insights should ensure that inclusivity is integrated throughout planning, implementation, and evaluation, making protected areas more open and equitable places.

The section below presents the potential roles of visitors with disabilities.

1. Experts by experience

First, people with disabilities, due to their irreplaceable lived experience, are able to identify barriers that may be invisible to others. Examples may include overly intense inclines on particular hiking routes that may be too challenging for less mobile people, inadequate signage, incompatibility of the website, or poor staff awareness of the issues faced by visitors. Therefore, their participation in planning and piloting ensures that infrastructure and communication are adequately prepared. These consultations may help identify the need for tactile maps, audio descriptions for blind visitors, clearer wayfinding for people with cognitive impairments, and quiet zones for visitors with sensory sensitivities.

2. Advisors and co-designers

Disability organizations can contribute to increased accessibility in the following ways:

- Review design plans of hiking routes
- Pilot solutions before their implementation
- Provide input on the quality of communication formats (e.g., Braille, large print, audio).

In line with *universal design principles*, improvements made to satisfy the needs of persons with disabilities may enhance the experience for other groups of visitors as well. For example, older visitors will benefit from better-contrast signage, while accessible paths will improve comfort for families with more minor children and strollers.

3. Educators and ambassadors for an inclusive nature

People with disabilities can play an important role in raising awareness and promoting an inclusive view of protected areas. By taking part in campaigns and being clearly represented in communication materials, they help normalize diversity and strengthen the message that nature is meant for everyone. Their insights can assist staff in creating more inclusive communication and service practices. At the same time, by sharing their personal stories—through social media, blogs,

workshops, or public events—they serve as strong ambassadors who motivate others and demonstrate that accessibility, conservation, and enjoyable outdoor experiences can coexist.

4. Monitors and evaluators

Feedback on usability, safety, and comfort after the implementation of new measures is extremely important for the protected areas management. It provides them with essential information needed for adaptive management and continuous improvement. Managers are also recommended to establish long-term partnerships with local disability councils or associations that could contribute by participating in accessibility audits and visitor satisfaction studies.

2.5.1 Examples of accessibility needs and inclusive responses

The table below presents examples of how to address challenges related to disabilities through universal design and targeted customization. It is clear that there is a variety of accessibility needs, which require a range of different measures that can make protected areas more inclusive.

Table 2. Examples of accessibility needs and inclusive responses

Type of disability	Common barriers in protected areas	Inclusive response
Mobility impairments	Steep or uneven terrain, stairs, inaccessible toilets, difficult access to the main attraction point of attractions, lack of seating, barriers connected to transport or accommodation	- Provide step-free routes, ramps, accessible viewing platforms, and rest areas - Ensure accessible toilets and designated parking near entrances - In certain locations, offer wheelchairs or other mobility - Provide information on accessible routes. Hiking maps may include information on the type of surface and inclination
Visual impairments	Poor contrast or cluttered signage, lack of tactile or auditory information, obstacles on paths, limited online accessibility.	- Install tactile maps and Braille - Use high-contrast, large-print materials, and simple pictograms on signage - Provide visitors with audio guides, smartphone apps that have voice navigation - Maintain several obstacle-free paths and consistent tactile cues

Hearing impairments	Lack of videos with captions, public announcements are made without visual alternatives, limited staff awareness of the issue.	- Include subtitles or transcripts for videos and presentations - Install hearing enhancement system (e.g., induction loops) at reception areas - Train staff working with visitors in basic sign language
Cognitive disabilities	Complex text or signage, unclear navigation, abstract information, lack of support in understanding safety rules.	- Use easy-to-read language and clear icons - Provide guided tours or personal assistance when needed - Prepare artistic, non-technical maps that use illustrations, color-coded routes, and simplified interpretation materials - Use repetition and visual cues in visitor education
Communication Disabilities	Difficulty understanding spoken or written information, speech impairments, language barriers.	- Use multiple communication modes (e.g., visual, written, oral) - Offer materials in plain, simple language in different formats - Allow digital or non-verbal feedback options (e.g., virtual reactions, Mentimeter polls) - Train staff with the skills needed to facilitate communication with this group
Neurodivergent conditions (e.g. autism, ADHD, sensory processing differences)	Overstimulation from noise and crowds, bright light, unpredictable environments	- Create quiet or low-sensory zones (e.g., away from intensive roads, designate different zones for specific activities) - Provide information on what to expect (e.g., sensory maps, virtual tours) - Use predictable signage (e.g., same icons, consistent colors)
Other mental health conditions	Anxiety, fear of being judged, difficulty with crowds or complex rules.	- Provide calm, safe spaces to rest (e.g. shaded rest points, benches with backrest, places away from the crowds)

		- Offer transparent information and clear procedures (e.g., visiting rules, difficulty levels, and length of hiking routes, fees) - Avoid overly complex bureaucracy (e.g., too long or multiple forms needed to be filled out to join a forest bathing activity)
Chronic illness or fatigue	Limited stamina, frequent need for rest, unpredictable symptoms.	- Provide frequent resting points and shaded areas - Offer flexible participation options in guided activities (e.g., option to join or leave a bird watching tour at designated points; individual nature excursions) - Foresee vehicle access or return options for those who cannot complete the entire activity (whether individual or guided)
Multiple disabilities	Combined physical, sensory, or cognitive challenges that create layered barriers.	- Apply universal design solutions that integrate multiple accessibility features (e.g., accessible entrance, interactive exhibits) - Offer tailored support or personal assistance where needed - Establish partnerships with disability organizations for tailored advice

2.6 Understanding visitor motivations for involvement

Visitors may have different backgrounds, expectations, and emotional connections to the area, which all influence their motivations to participate in planning or consultation activities suggested by protected area management. Therefore, in order to create meaningful and lasting relationships, it is crucial to understand the motivation of each visitor group.

Examples of motivation to participate may include:

- To learn more about ecosystems and wildlife
- To act on behalf of the represented group to improve visitor experience and inclusivity by enhancing signage, routes, and other infrastructure
- To better understand management processes and to gain knowledge about conservation

- Emotional connection to the area and the concern about how the management decisions will impact the future of the area
- To contribute to the research and stewardship

This list is not exhaustive. Every protected area should be interested in surveying its visitors to understand their inner motivations for partnering with management. There are different groups of motivations that should be considered, including personal motivations (e.g., learning, emotional attachment), community-based motivations (e.g., representing specific groups seeking inclusivity), or conservation-oriented motivations (e.g., protecting ecosystems, contributing to research). To effectively design participation processes, managers need to address diverse expectations.

The next section presents the key principles that make visitor involvement truly inclusive. It explores how universal design, accessibility, and equity can guide participation processes to ensure that protected areas deliver value for every visitor.

2.7 Key principles for inclusive visitor engagement

Inclusive visitor engagement is defined by creating equal opportunities for every group, irrespective of age, physical and mental abilities, or background, to take part in the management of protected areas. It recognises diversity, builds trust, and provides visitors with a sense of shared ownership, making them partners in stewardship rather than just passive users of services. The principles provided below can be used as a reference guide that allows building a foundation for planning participation in an inclusive way.

Accessibility

Accessibility is considered a starting point for inclusion, as it ensures that everyone can participate without unnecessary barriers. It covers physical, digital, sensory, and communication needs.

Examples of key actions:

- Step-free meeting venues, easily accessible toilets, and transport options
- Clear fonts, good colour contrast, videos with captions, and sign-language interpretation in bigger events
- Websites and feedback tools that follow recognised international accessibility criteria (e.g., forms should be properly labelled so that screen-reader users can hear each field name)
- Fatigue, mobility, and sensory sensitivities should be considered when announcing meeting times and formats

Representation and equity

Equity implies that different groups of visitors, including visitors with disabilities, older people, youth, or minority communities, are able to participate without barriers or any additional challenges.

Examples of how managers can support equity:

- By partnering with disability organisations to reach underrepresented groups
- By offering remote participation options or organising personal meetings when needed
- By choosing appropriate meeting locations so that visitors could easily participate
- By actively recruiting diverse members for advisory groups

Early and continuous engagement

Early engagement helps shape priorities, while ongoing dialogue builds accountability. Visitors should be involved from the start, not only when decisions are nearly finished.

Good practice includes:

- Consultations with visitor and disability groups before draft plans are completed
- Publishing clear timelines that show how visitors' input will influence decisions
- Providing the list of suggestions made by visitors and how they are reflected in the outcome
- Asking for feedback after implementation in order to refine future actions

Transparency and mutual respect

People participate more openly when they understand their role, why they are being consulted, and what the weight of their contributions is.

Suggestions for transparent engagement:

- Clearly state the goals and boundaries before the participation process begins
- Share summaries of feedback received from different groups of visitors and explain decisions
- Acknowledge suggestions even when they cannot be fully incorporated into strategies or actions

Universal design

Universal design means creating tools and activities that work for as many people as possible from the very beginning. Instead of adapting activities or infrastructure later for specific groups, it builds inclusivity into the design itself.

Examples of universal design in participation:

- Offering multiple ways to share information, including text, audio, visuals, or digital resources
- An online survey that works on screen readers, allows flexible time, and is written in plain language
- Offering both in-person and online participation options
- Piloting routes or materials with a diverse group of visitors

Flexibility and responsiveness

People have different schedules, abilities, and communication preferences. Flexible engagement should be able to adapt to very diverse needs.

Examples include:

- Offer shorter or multiple sessions to suit work schedules
- Provide participants with quiet and low-sensory spaces when needed
- Adjust materials to different levels of expertise or languages.
- Continuously modify used methods based on participant feedback

Shared learning and empowerment

Engagement is considered most effective when visitors and staff learn from each other. If people are able to see that their ideas are reflected in real outcomes, the empowerment grows.

Examples of ways to encourage shared learning:

- Co-creating materials and activities (e.g., hiking guides) with diverse groups of visitors
- Joint training sessions with staff and participants on inclusive communication or conversation techniques
- Sharing evaluation results and encouraging suggestions for possible improvements
- Sharing citizen-science tasks so that staff and visitors both contribute to certain activities, coordinate their actions, and learn from each other (e.g., wheelchair users identifies accessible spots to view wildlife, and staff later add this information to the park's official website)

Evaluation and continuous improvement

Regular evaluation helps managers understand who participates, who is missing, and how current engagement can be improved.

Practical steps:

- Track which groups are represented and which may be missing (e.g., by anonymous demographic information)

- After events or workshops, use short satisfaction surveys or focus groups with disabled visitors to gather immediate feedback
- Check the accessibility of materials and or routes on a yearly basis
- Adjust engagement methods if the findings show any recurring barriers or areas needing improvement

Building institutional capacity

Long-term inclusion highly depends on investing in park management staff, not solely in the infrastructure.

Examples include:

- Training staff in accessibility, facilitation, and inclusive communication (e.g., teaching staff how to guide families with young children, or teaching how to organize annual workshops on welcoming people with disabilities)
- Integrating inclusion goals into staff responsibilities and annual planning (e.g., requiring annual accessibility reviews of visitor materials)
- Allocating budget for accessibility and engagement initiatives
- Encouraging leadership to model inclusive practice

2.7.1 Checklist for inclusive visitor engagement

The checklist below is designed to help managers and staff ensure that all groups of visitors, such as families, the younger generation, older adults, different minority groups, and people with disabilities, have equal opportunities to participate in the engagement activities. It supports a universal approach to inclusion by recognizing that visitors may face different barriers related to access, time, mobility, or their communication preferences.

Protected area managers are recommended to review and update this checklist on a regular basis as part of annual planning activities or after major engagement projects. In addition, a record of progress and lessons learned by a particular institution will serve as the foundation for continuous improvement, which is the foundation of genuine inclusion.

Table 3. Checklist for inclusive visitor engagement of all visitors

Category	Checklist items
1. Accessibility for all visitors	☐ Venues, paths, and facilities are easy to access for everyone (e.g., step-free routes, rest areas). ☐ Toilets, parking, and transport options accommodate diverse needs (e.g., families, older adults, wheelchair users). ☐ Digital tools and websites are designed to meet accessibility standards (e.g., WCAG 2.1).

	☐ Information is provided in multiple formats (e.g., print, visuals, audio, videos with captions, easy-to-read). ☐ Event timing and duration take into account fatigue, mobility, work duties, and travel distance.
2. Representation and equity	☐ A wide range of visitors is proactively invited (e.g., youth, older adults, minority groups, families, people with disabilities). ☐ Barriers related to cost, distance, or time are minimised as much as possible (e.g., hybrid meetings, choosing specific locations for meetings). ☐ Advisory groups reflect the diversity of the visiting public. ☐ Community organisations, including cultural, youth, and disability groups are allowed to participate as partners.
3. Early and continuous engagement	☐ Engagement begins at the planning stage so that visitors could influence what issues are prioritised and how decisions are framed. ☐ Clear timelines explain when visitor input will be reviewed and how it will influence upcoming decisions. ☐ It's easy for visitors to see what happened with their ideas, what was taken on board, what changed, and why. ☐ Participants have a chance to be involved through implementation and evaluation.
4. Transparency and respect	☐ Engagement purpose and expectations are communicated in plain and understandable language. ☐ Visitors are familiarised with legal, environmental, or budget constraints openly. ☐ Contributions from all groups of visitors are acknowledged transparently. ☐ The principles of fairness, courtesy, and respect guide interactions.
5. Universal design and communication	☐ Engagement tools are designed for broad usability from the beginning of the process. ☐ Plain language and clear visuals are standard practice. ☐ Information is shared through multiple channels (print, audio, digital, in-person). ☐ Images used for marketing and communication reflect the diversity of visitors.

6. Flexibility and responsiveness	☐ Engagement is designed to accommodate different needs, such as quiet spaces, shorter sessions, childcare considerations, and online access. ☐ Participant feedback eventually leads to visible improvements. ☐ Designed activities support diverse communication styles and comfort levels that visitors need.
7. Shared learning and empowerment	☐ Engagement supports two-way learning between visitors and staff. ☐ Visitor ideas inform materials, actions, or decisions taken. ☐ Success stories are shared publicly to recognise the contributions of the visitors.
8. Evaluation and continuous improvement	☐ Participation data is monitored to see who is represented and who may be missing. ☐ Accessibility and satisfaction are evaluated on a regular basis. ☐ Lessons learned from earlier participation guide future engagement planning. ☐ Evaluation results are shared openly with different groups of visitors and other stakeholders.
9. Building institutional capacity	☐ Staff take part in ongoing training on accessibility and practical facilitation skills, such as how to communicate and work with different groups of visitors. ☐ Inclusion goals are included in job roles, performance indicators, and annual plans. ☐ Budgets are prepared to support inclusive engagement and accessibility improvements. ☐ Leaders demonstrate inclusive behaviour themselves (e.g., participates in consultations, uses accessible communication, supports diverse voices in decision-making process.

3. PRACTICAL IMPLEMENTATION OF VISITOR INVOLVEMENT

Section 1 and Section 2 aimed to describe why visitor involvement matters and who is involved, while this section focuses on practical implementation, providing managers with information on how to carry out visitor involvement effectively and inclusively. This part of the roadmap offers practical tools, examples, and checklists which can help protected area managers to turn strategies into daily practice.

The steps described below can be applied either in small, issue-specific initiatives and larger, ongoing involvement programs organized by the protected areas. While visitor involvement benefits most when integrated into a continuous management cycle, protected areas can still adapt and apply only those elements that best fit their needs, capacity, and context. Before applying these steps in practice, protected area managers first need to ensure that their organisation is prepared for the engagement. Next subsections outline the important internal conditions required to support effective and inclusive visitor involvement.

3.1 Establishing internal readiness

It is important to be structurally ready before approaching visitors (Auhagen et al., 2021). Preparing the organisation ensures that staff are coordinated and available, the budget is allocated, venues and materials are accessible, and relevant partners are ready to contribute.

For example, if a protected area plans to consult visitors about the need to improve the quality of bird-watching spots, managers must ensure that their team responsible for the maintenance of such objects is aware of the engagement and prepared to integrate the results. The following table provides the readiness checklist.

Table 4. Organizational readiness checklist

☐/☑	Item	Description
☐	**Coordinator assigned**	There is an appointed staff member who is formally responsible for planning and coordinating visitor involvement activities. This person is assigned to keep the timeline, communicate with partners, ensure accessibility measures are implemented, and act as a focal contact point
☐	**Budget allocated**	Institution set aside funds for materials (e.g., maps), accessibility (e.g., large-print versions, transport support), digital tools (e.g., survey platforms), and logistics (e.g., venue hire, refreshments)

☐	**Staff time scheduled**	Various engagement tasks, such as planning, conducting sessions, or analysis of the feedback, are included in staff work plans and schedules
☐	**Digital tools available**	To ensure smooth communication, the team has access to functional equipment and software needed for implementation: laptops, tablets, projectors, online meeting tools, survey platforms, shared drives for documentation, and basic graphic tools
☐	**Staff trained in facilitation**	At least one team member has the skills (e.g., managing group dynamics, encouraging equal participation) to run meetings, workshops, or group discussions in an inclusive way.
☐	**Accessibility focal point identified**	To meet the needs of different groups of visitors, including people with disabilities, at least one staff member is able to ensure that all materials, venues, and processes meet accessibility requirements
☐	**Venue accessibility checked**	The location for engagement activities is accessible (e.g., step-free entrances, accessible toilets, clear signage).
☐	**Accessible formats available**	Materials are already prepared in formats suitable for diverse visitors (e.g., large print, plain language, high contrast, screen-reader friendly PDFs)
☐	**Partnerships activated**	Relevant partners (e.g., tourism service providers, disability organisations, NGOs, schools, municipalities) have been contacted and briefed. This may help with the dissemination of information or logistics
☐	**Visitor statistics up to date**	To select appropriate engagement timing, content, or outreach methods, quantitative and qualitative data about visitors (e.g., numbers, demographics, motivations) is available
☐	**Underrepresented groups identified**	Protected area knows which visitor groups typically do not participate (e.g., youth, visitors with disabilities, non-locals, minority communities) and can plan targeted outreach to include them when needed
☐	**Past engagement reviewed**	To prevent future mistakes, results and experiences from previous engagement activities have been assessed to understand what worked, what didn't, and what unresolved issues remain

3.2 Team roles and internal coordination

To avoid any misunderstandings and ensure smooth implementation, even in small protected areas, there is a need for a clear internal coordination among the staff members.

Below is a list of roles that may be *combined* depending on the size of the organization.

- *Engagement coordinator* oversees planning, scheduling, content preparation, and reporting
- *Facilitator* leads engagement sessions, and ensures inclusive and respectful dialogue with participants
- *Accessibility focal point* reviews all materials and venues for compliance with accessibility requirements
- *Communications lead* prepares announcements, updates, and visual materials
- *Data manager* collects and organises visitor input and supports decision-making process

Staff should understand what is the purpose of the engagement, key timelines, and their responsibilities. To ensure alignment, it is useful to organize a short internal briefing meeting at the start of each engagement cycle.

3.3 Ensuring accessibility from the start

Management should consider the needs of visitors with different abilities, learning styles, and communication preferences. As accessibility is one of the key requirements, it must be integrated from the very beginning.

There exist different dimensions of accessibility:

- *Physical accessibility* (locations can be reached and used safely)
- *Communication accessibility* (information is presented clearly and in multiple formats)
- *Digital accessibility* (online and digital tools can be used by everyone
- *Sensory accessibility* (overstimulation and supportive environments are provided)
- *Procedural accessibility* (existence of different ways to participate and contribute)

The checklist provided below is helpful for early planning.

Table 5. Minimum requirements for accessibility

☐/☑	Requirement
☐	Step-free venue suitable for mobility-impaired participants
☐	Accessible toilets are located close to the engagement area

☐	Seating with backrests available for participants who need support
☐	Printed materials prepared in large-print and high-contrast versions
☐	Digital documents provided in formats compatible with screen readers
☐	Videos and audio materials accompanied by captions or transcripts
☐	Remote participation option available (e.g., online meeting)
☐	Staff assigned to provide assistance
☐	Clear signage and wayfinding from the arrival point to the activity location

3.4 Working with external partners

With the help of partner institutions, protected areas may extend their reach through partners' networks, increase capacity, co-organize activities, and build credibility when engaging participants from diverse groups. Collaboration with partners may also bring additional insights into visitor behaviour and local needs.

Use the checklist below to ensure that all essential partners have been identified, contacted, and that the engagement process is aligned with them if needed. Partner roles and contributions should be documented to clarify expectations and avoid misunderstandings. In order to ensure consistent and accurate public information, there is a need for alignment of communication messages with partners.

Table 6. Partnership activation checklist

☐/☑	Task
☐	Contact disability organizations to review accessibility plans and help to reach potential visitors with disabilities
☐	Engage tourism providers to support communication with tourists and promote engagement opportunities
☐	Inform local authorities to ensure alignment with municipal planning and ongoing local initiatives
☐	Connect with schools and youth groups to include younger visitors to get the full spectrum of perspectives and needs
☐	Coordinate with NGOs (e.g., those who work with conservation) to benefit from their expertise and volunteer networks

3.5 Understanding your visitors

Before starting the visitor engagement process, it is crucial for managers to understand who their visitors are, why they come, and what barriers are they facing. Therefore, this step focuses on the data collection that is needed to design practical engagement activities. This information allows staff to anticipate participation challenges, select the most suitable communication channels, and adapt the methods used to the visitor population. Data collection will also allow to identify visitor groups who are currently underrepresented in engagement processes It is important to note that the checklist provided below aims to help engagement planning, rather than implement a full visitor survey.

Table 7. Baseline data checklist

☐/☑	Data
☐	Current seasonal visitor numbers and patterns (e.g., high or low-traffic periods)
☐	Demographics of visitors (e.g., age groups, disability considerations)
☐	Main motivations for visiting (e.g., nature observation, relaxation, education, escape)
☐	Physical, communication, or procedural barriers that visitors commonly face
☐	Complaints, challenges, or recurring issues raised by visitors
☐	Previous engagement activities and their outcomes
☐	Information on preferred communication and participation formats (e.g., online, on-site, group activities)

3.6 The visitor involvement cycle

The ***Visitor Involvement Cycle*** provides managers with a structured workflow for planning and delivering visitor engagement. It is structured with the logic to guide managers from initial preparation to the evaluation process. The cycle describes what must happen at each stage to ensure quality and consistency, while the specific *tools* are described in Section 3.7.

Figure 2. Visitor involvement cycle

Step 1: Define purpose, scope, and desired outputs

To ensure effective involvement, there is a need to delineate *why* visitors will be engaged and *what* the protected area management expects to achieve. Purpose and planned scope should be shared with staff and partners.

To do this, managers should clarify the following things:

- The issue or decision that engagement will inform (e.g., improving walking paths, updating signage)
- What visitors can influence and what constraints exist (legal, ecological, financial)
- The desired outputs: such as a prioritised list of improvements, or mapped problem areas
- The engagement level (inform, consult, involve, collaborate, or empower)

Timeline guidance

This work usually takes place in Months 1–2 of the engagement cycle. It is recommended to complete this part before any outreach or method selection process begins.

Step 2: Identify and reach desired visitor groups

Each engagement activity must reach the groups who are most relevant, most affected, or often underrepresented, rather than to reach every visitor.

What should be identified:

- Visitor groups that are linked to the specific issue
- Groups whose lived experience provides essential insight into the issue (e.g., wheelchair users who spend time on the beach of the protected area)
- Groups who face participation barriers (e.g., young families with children, people with disabilities)
- Groups who are regularly excluded from engagement (e.g., youth, non-locals)

Examples of how to effectively reach visitors:

- Inviting disability organisations to nominate participants
- Placing posters at the most visited places
- Asking tourism providers to share the invitation through their own channels
- Using social media or newsletters
- Offering remote participation for people who cannot attend in person

Timeline guidance

Visitor identification and outreach planning are commonly developed during Months 1–2, while initial outreach happens at the beginning of Month 3.

Step 3: Choose the right level and method of involvement

This step determines *how* visitors will participate. Thus, managers should accurately determine on:

- The level of involvement that is appropriate to the issue (inform → empower; *see Section 2.3*);
- The engagement methods (e.g., surveys, workshops, mapping, digital consultations, citizen science; *see Section 3.7 for full details*);
- The accessibility requirements of each method (e.g., digital access, plain language materials, captioned content, tactile materials);
- The expected time investment for visitors and staff.

Note: The method must always match the purpose, available resources, visitor groups that are involved, and the type of information needed (e.g., opinions, lived experience).

Timeline guidance

Method selection is commonly finalised during Months 2–3, when the groups of visitors and partners are identified and the preparation of materials begin.

Step 4: Prepare information materials, accessibility, and logistics

Another step is to ensure smooth engagement and the ability to contribute by making sure that all supporting conditions are in place.

Table 8. Preparation of information materials, accessibility, and logistics

Information materials	Accessible logistics	Effective participation
• plain-language explanations of the issue • maps, photos, diagrams, and visual aids • large print / high contrast / screen-reader friendly versions • translated versions if appropriate	• selecting an accessible venue • providing with clear directions and signage • planning breaks and seating • setting up quiet or low-stimulation spaces if needed • arranging remote participation options	• agenda and structure • facilitation plan • consent and photography guidelines • materials for note-taking, mapping, voting, or group work

Timeline guidance

Preparation and testing of materials and logistics should begin in Months 2–3 and be finalised immediately before the engagement delivery process in Month 3 or 4.

Step 5: Facilitate inclusive participation

To achieve high-quality results, there is a need for facilitation that ensures that every participant's contribution is valued and appreciated. Staff should create space for real input, rather than direct people towards the desired answer. The following facilitation practices should be considered:

- Begin with a clear introduction of purpose and process

- Use visual and verbal information presentation modes
- Choose the right pace for the session so that participants are able to absorb information
- Provide participants with different ways to contribute (e.g., speaking, writing, mapping)
- Encourage participants, who are quieter, to share information and balance dominant voices
- Adapt to various accessibility needs (e.g., captioning, simplified explanations)
- Periodically summarize key points to confirm you understand participants correctly
- Ensure accurate and neutral documentation of participants' contributions

Timeline guidance

Engagement delivery typically happens during Months 3–4, and should be aligned with visitor flows and staff availability.

Step 6: Analyze, prioritize, and integrate feedback

This step includes bringing together all input for analysis, including written, verbal, visual, and digital. Below are several guidelines that may help in the data analysis process:

- Grouping inputs into separate themes (e.g., accessibility, infrastructure)
- Identifying issues or strong consensus shared by the majority of the participants
- Recognising minority viewpoints that link to important insights
- Assessing the feasibility of the provided suggestions (e.g., legal, ecological, financial)
- Distinguishing between quick wins useful in the short term and longer-term needs

Timeline guidance

Analysis and internal decision-making commonly take place in Months 5–6, depending on how complex the activities were.

Step 7: Communicate decisions and outcomes

To build trust and encourage future participation, a structured report should be prepared after analysis for dissemination among visitors. The document prepared for sharing should include the following elements: a brief summary of visitors' insights, the actions planned to be taken, those that cannot be carried out for specific reasons, implementation timelines, and a clear indication of which visitors' suggestions will receive immediate attention from the protected area management.

Different types of communication channels should be used to disseminate this information, including online platforms, visitor centres, or through partners such as NGOs and tourism service providers.

Timeline guidance

Communication of results and implementation of updates usually begin in Months 6–7, with follow-up communication continuing as actions progress.

Step 8: Evaluate and improve the engagement process

To ensure continuous improvement, after each engagement cycle, it's important to assess:

- Who participated and who did not?
- Were the accessibility arrangements effective enough?
- Was the selected method suitable for the purposes?
- What was easy and what was challenging for staff?
- Are there any follow-up actions that need to be scheduled?

It can be conducted in the form of internal reflection or to strengthen organizational memory by documenting lessons learned.

Timeline guidance

Evaluation and lessons learned should be documented toward the end of the annual cycle (Months 8–12), contributing to the planning process for the next cycle.

3.7 Tools and methods for visitor involvement

This section presents the practical tools and methods available to managers. While the cycle in *Section 3.6* describes the *process*, this section describes the *tool and methods* used during engagement.

Table 9 below provides protected area managers with a practical overview of engagement tools and methods. Each row clarifies when a method is appropriate, useful, or most effective, helping staff match the approach to the purpose defined in the Visitor Involvement Cycle.

Table 9. Tools and methods for visitor involvement

Category	Tool /method	When to use
Information & awareness	On-site signage	Used when visitors must understand a particular issue during their visit (e.g., safety, seasonal closures).
	QR-coded info panels	Used when the issue requires more detail than can fit on a sign.

	Visitor centre displays	Used for complex topics that benefit from visuals, various models, or storytelling (e.g., habitat restoration, management challenges).
	Printed leaflets/brochures	Used when visitors need information they can take away and read later (e.g., project summaries).
	Short explanatory videos	Used when visual explanation improves understanding (e.g., demonstrating impacts, showing before–and–after type of scenarios) or when reaching specific audiences, such as younger visitors.
Consultation (feedback)	On-site paper surveys	Used when there is a need for fast feedback from many visitors.
	Online surveys	Used to reach remote, international, or post-visit participants, or when there is a need for larger sample sizes. Easy to share with partners.
	Comment boxes	Used when managers want continuous, low-effort feedback that visitors can submit at any time.
	Interviews	Used when managers need contextual, deeper comments gathered during the visit (e.g., asking hikers about path conditions).
	Quick polling	Used when you need rapid, visual input (e.g., choosing priorities). Works well during events
Consultation (exploring the issues)	Short focus groups	Used when exploring perceptions, needs, or concerns in more depth than a survey allows.
	Small stakeholder circles	Used when a particular group of people is directly affected (e.g., photographers, mobility-impaired visitors) and targeted discussion is required.
	Guided walk-and-talk sessions	Used when issues are tied to specific sites or hiking paths. Participants can directly point out barriers, problems, or opportunities.
Co-Creation / involvement	Participatory mapping	Used when identifying spatial issues such as hotspots, conflict areas, accessibility problems, or preferred routes.
	Design workshops	Used when managers want to develop solutions, concepts, or improvements that benefit from creative group work.
	Scenario-building sessions	Used when there is a need to compare different management options

	Piloting sessions	Used when managers need hands-on feedback to refine signage, hiking paths, and similar features.
	Visitor advisory groups	Used when long-term, continuous input is needed on recurring issues or projects.
Citizen science / volunteering	Wildlife monitoring	Used when there is a need for additional data across large areas or long periods.
	Trail or route assessments	Used when visitors can help identify maintenance needs or safety issues
	Litter or disturbance mapping	Used when tracking behaviours or pressures across the protected area (e.g., picnic hotspots, noise disturbance zones).
	Accessibility walk-throughs	Used when managers need to access the real experience of visitors with mobility, sensory, or cognitive challenges.
Digital engagement	Virtual meetings / webinars	Used when participants cannot attend in person or when managers need to include remote partners, international visitors, or seasonal visitors.
	Online interactive maps	Used when managers need location-specific feedback or want visitors to mark points of interest or barriers.
	Social media	Used to gather quick input or promote engagement to broad audiences (e.g., younger visitors, specific nationalities).
Partnership & delegation	Joint outreach with tourism providers	Used when engaging visitors who book tours, stay in local accommodations, or come through organised channels.
	School or youth programmes	Used when managers wish to involve and gather insights from younger audiences, and create learning opportunities.
	NGO-supported engagement events	Used when specialised knowledge, volunteer support, or credibility is needed to organise or promote engagement activities.

4. MONITORING AND CONTINUOUS IMPROVEMENT

This section provides information on how the visitor involvement system functions across the protected area as a whole. Its purpose is to help ensure that engagement remains relevant, inclusive, and well aligned with management priorities. System-level monitoring may help managers to identify gaps, strengthen partnerships, and adjust their approaches as visitor needs evolve. It also contributes to the internal learning process.

4.1 Purpose of system-level monitoring

System-level monitoring allows for protected area management to understand whether the overall visitor involvement framework is achieving its objectives. It examines patterns across all engagement efforts.

System-level monitoring should help to answer the following types of questions:

- Is visitor involvement helping inform management decisions and improve the outcomes?
- Are more visitors, including underrepresented groups, participating over time?
- Are protected area partners meaningfully engaged and contributing to the process?
- Are the actions based on visitor input actually being carried out as planned, or do there exist any unnecessary delays?
- Is the visitor engagement approach accessible and transparent?
- Are staff improving skills and confidence in organized involvement practices?

4.2 What should be monitored at the system level

Table 10 below presents the key elements that protected area management should keep track of to evaluate the overall health of visitor involvement processes. It is important to note that these indicators focus on long-term trends rather than individual engagement activities.

Table 10. Elements that need monitoring at the system level

Monitoring area	What to track
Volume and variety of activities	- Number of organized engagement activities per year. - Diversity of methods used (e.g., workshops, mapping, citizen science). - Balance between simple feedback tools and more sophisticated co-creation methods.

Participation diversity	- Which visitor groups participated (e.g., families, youth groups) - Inclusion of underrepresented groups (e.g., people with disabilities, non-locals). - Seasonal (e.g., low versus high season) or spatial (e.g., forests versus visitor centres) participation patterns.
Partnerships	- Number and type of partners (e.g., tourism providers) that were engaged. - How regularly and effectively each partner collaborates. - How partners actually contributed (e.g., with analysis, dissemination).
Implementation of visitor-informed actions	- Visitor-informed actions have been fully implemented. - Actions that are still in progress and reasons for delays. - How clearly and widely the visitor engagement results are communicated to visitors (e.g., updates on-site).
Accessibility of engagement processes	- Whether engagement activities consistently offer accessible materials. - Accessibility of online and digital tools. - Protected area visitors' feedback on accessibility barriers.
Staff capacity and learning	- Necessary staff skills, confidence to plan, facilitate and evaluate, and completed training. - Time and resources allocated to engagement. - How well different departments (e.g., education, communications, visitor services) work together during different engagement processes.
Visitor perceptions	- Visitor satisfaction with existing engagement opportunities. - Whether visitors feel their input actually influences management decisions.

4.3 Annual review and continuous improvement

An annual review helps to ensure that visitor involvement remains effective and aligned with the protected area's management priorities. Instead of assessing individual engagement activities, the annual review should look at the *overall system:* how visitor involvement functioned across the year and what improvements would be needed moving forward.

This light, annual review keeps the involvement system evolving based on real experience, without adding unnecessary administrative burden:

- Bring together the information collected throughout the year using the system-level monitoring elements listed in Section 4.2
- Reflect on how the involvement system functioned overall (e.g., planning, coordination, communication)
- Identify what worked well and what challenges appeared during the process**,** especially those that affect multiple engagement activities
- Decide which improvements are needed to be introduced in the coming year (e.g., strengthening partnerships, adjusting outreach approaches, improving accessibility arrangements)
- Document the main lessons learned so they can be shared internally and used to strengthen the overall involvement system over time

5. EXAMPLES OF GOOD PRACTICES IN VISITOR INVOLVEMENT

Case studies presented below explore how protected areas have involved visitors directly in their everyday management practices that produce tangible positive results. Illustrated examples present a wide spectrum of engagement methods, such as various community-led initiatives, advisory groups, and citizen-science programmes. Case studies vary in their geography, governance, and visitor profiles, but share a common principle: participation strengthens both conservation outcomes and social legitimacy.

Case study 1: New Forest National Park (UK)

Background

New Forest National Park (NFNP) was established in southern England in 2005 and covers over 560 km² of ancient woodland, heathland, and wetlands. Park uniqueness is characterized by a diverse array of plants and animals, a long-standing tradition of shared use, a rich history, and distinct local communities. At the same time, it is also one of the most heavily visited national parks in the UK, with approximately 15 million visits per year (NFNPA, n.d.-b). 58% of visitors live either in National Park itself or within 8km radius beyond the park. Absolute majority of both day and staying visitors come from the UK.

Due to intense visitor pressure, management has faced challenges, including balancing recreation, conservation of fragile ecosystems, and local livelihoods. Issues related to access, parking, and recreational impacts occurred on a rather regular basis, and many visitors had a limited understanding of why certain management restrictions were in place.

It was apparent that top-down regulation alone could not sustain the landscape's ecological and social balance. Park management came up with the idea of institutionalizing participation by including visitors, access groups, and NGOs connected to conservation in a formal decision-making role.

Figure 3. New Forest National Park (UK). Adapted from: OpenStreetMap contributors

Visitor-involvement mechanisms

In 2010, the New Forest National Park Authority presented the *Recreation Management Strategy 2010-2030.* This long-term plan explicitly recognized that visitor participation was essential for sustainable management. It prepared mechanisms for structured engagement through advisory and steering bodies. The input for this strategy was collected from over 80 stakeholder organizations representing recreation users and visitor interests. It is a good example of public consultation integrated into policy development.

The Recreation Management Strategy Steering Group, comprising representatives from Forestry England, Hampshire County Council, the National Park Authority, New Forest District Council, Test Valley Borough Council, Natural England, and the Verderers, serves as the primary forum for discussing overall strategic opportunities. Although this group does not include direct visitor representatives, it uses recommendations that arise from visitor-related forums and user groups, which ensures that visitor issues are brought into strategic discussions.

In addition, visitors are indirectly represented through formal advisory structures. For example New Forest Consultative Panel consists of over 90 organizations representing walkers, cyclists, equestrians, tourism, conservation, and community interests. Another statutory body is the New Forest Access Forum, which advises on accessibility matters, surfacing, signage, and includes disability and user-group representatives. In addition, the Cycle Working Group and the Equine Forum contribute by providing practical user insight regarding the safety of the trails, infrastructure, and other conflict issues. These bodies aim to provide visitor perspectives, which in the end influence decisions without requiring mass public meetings.

Visitor behavior becomes a primary decision driver (where people go shapes where infrastructure goes). Data analysis helps to identify pressure points, such as fragile habitats or overused car parks. Therefore, parks conduct visitor surveys, route-use mapping, and seasonal area use patterns, which all influence management decisions.

There are many activities, such as guided walks or nature-based education, organized by the New Forest, as it is a popular spot for locals or school visits from nearby areas. The Forestry Commission operates a volunteer ranger service with 60 members to assist full-time rangers and keepers, providing practical advice and information to the public (e.g., encouraging responsible behavior through learning) and performing practical tasks like litter pickup.

Figure 4. Location of the New Forest National Park (UK). Adapted from: OpenStreetMap contributors

In addition, the Park Authority's website developed a "Get involved" section (NFNPA, n.d.-a) which lists multiple ways visitors and community members can participate, for example: reporting problems, joining campaigns, participating in events like the "New Forest Spring Clean".

Case study 2: Nuuksio National Park (Finland)

Background

Nuuksio National Park (Nuuksion kansallispuisto) is one of Finland's 40 national parks. It is located approximately 30 km from Helsinki across the municipalities of Espoo, Kirkkonummi, and Vihti. Park is known as one of Finland's most accessible and frequently visited protected areas. In 2023, it received 274,400 visitors out of a total of 3.6 million visits across other national parks, making it the third most visited (Metsähallitus, n.d.-a). It was established in 1994 and covers around 53 km² of forests, lakes, and mires. The park is managed by a state agency responsible for conservation and recreation management across the country.

Nuuksio's location between several urban areas creates a dual mandate: (1) protect a mosaic of forests, lakes, and wetland habitats, and (2) serve as a major outdoor destination for residents, school groups, and international visitors. Earlier, there used to be certain tensions between different visitor expectations, as some groups value tranquillity and low-impact activities, while others wish for more facilities, guided activities, and commercial services.

Recognising that sustainable management requires a balance between ecological protection and the diverse needs of park visitors, the national park aimed to enhance visitor involvement through structured cooperation, engagement of volunteers, citizen science programmes, and co-design of accessible infrastructure.

Figure 5. Nuuksio National Park. Source: Nuukso Lakeland

Visitor-involvement mechanisms

Management plan

Nuuksio's management plan (Metsähallitus, 2022) is the main strategic document that has been prepared together with stakeholders to balance conservation and recreation, and other uses. For the recent update of the management plan, participation was organised in several layers. A cooperation group was set up with representatives from key stakeholders, such as municipalities, nature tourism companies, and local residents.

In total, three open public events were held during the planning process. Afterwards, several events were held for different stakeholders, covering topics such as nature tourism, event organisation, mountain biking, hunting, and the perspectives of local residents. During the map-based survey, participants were able to comment on routes, facilities, problem areas, and wishes using an interactive map. It was followed by a broad formal consultation, during which organizations and individuals could submit written feedback for review, and the plan was adjusted afterward as needed. Throughout the process, visitors and user groups helped shape where trails, parking areas, and restriction zones will be, as well as how the park will be used in the coming decade.

Volunteer work and practical site management

Park is part of the national system of volunteer work in national parks and protected areas. Typical volunteer tasks include managing heritage landscapes, monitoring and protecting species, and supporting game and fisheries work (Bomas, 2023).

In Nuuksio, this general model is made very concrete through targeted campaigns. For example in 2021 WWF and Metsähallitus organised a volunteer campaign in Nuuksio to demolish 123 illegal campfire sites (Mirola, 2021). Another campaign removed 46 sacks of invasive garden lupine from valuable nature areas in Nuuksio to protect native meadow species. These activities directly involve visitors, local residents, and volunteer groups in the implementation of park rules. Participants have a chance to learn *why* certain restrictions exist and see immediate, tangible results of their own work.

Junior rangers and youth engagement

The national volunteer framework includes Junior Ranger activities in Nuuksio (Metsähallitus, n.d.-b). Junior ranger activities typically combine nature education with light practical tasks. In Nuuksio, children and young people:

- Learn about conservation, visitor rules, and the values of the park from rangers and educators

- Take part in supervised outdoor tasks (for example, cleaning fire sites or helping with simple maintenance) that support the park's day-to-day management
- Act as ambassadors for responsible behaviour when they visit with their families or youth groups

Because many of these participants are regular local visitors, involving them early builds a longer-term "stewardship culture" around the park.

Cooperation with tourism operators and local networks

Nuuksio's visitor management is heavily based on cooperation with tourism companies and other local actors who are often the first point of contact for the park's visitors. For example, Metsähallitus has a national nature tourism partnership model. Partner companies operate guided tours and services in protected areas under agreed sustainability principles. They help communicate park rules to visitors and feed back practical observations from the field.

In addition, Nuuksio Lakeland network of tourism companies promotes cooperation between businesses, works closely with municipalities and Metsähallitus, and highlights local sustainable services "under one roof" so visitors can more easily choose responsible options.

Due to these partnerships, visitors can indirectly impact park management because the feedback and needs of guided groups and customers influence how trails, services, and communications are developed. Companies serve as intermediaries, passing information back and forth between visitors and the park.

Collaborative research and monitoring

While some of the **research and monitoring are carried out** professionals, in Nuuksio's management plan volunteers and organised visitor groups are explicitly mentioned as partners. This means that part of the knowledge base behind management decisions is co-produced with people who use the park, rather than only with experts.

Case study 3: Great Smoky Mountains National Park (USA)

Background

The Great Smoky Mountains National Park (GSMNP) is located across Tennessee and North Carolina, covering approximately 2,106 km², and is the most visited national park in the United States, receiving around 12 million visits per year (National Park Service [NPS], 2025a).

The park is internationally recognized for its exceptional biodiversity of plant and animal life, and historic Appalachian cultural landscape. However, its popularity presents challenges: congested parking areas, trail overcrowding, traffic-related impacts, and pressure on natural resources. Over the past decade, the National Park Service has increasingly relied on visitor engagement, partnerships, and civic participation to shape policies related to visitor-flow management, education, and conservation.

In 2020, GSMNP launched a visitor experience stewardship engagement process to gather public input on visitor experience, signaling a broader shift toward ongoing, structured visitor involvement.

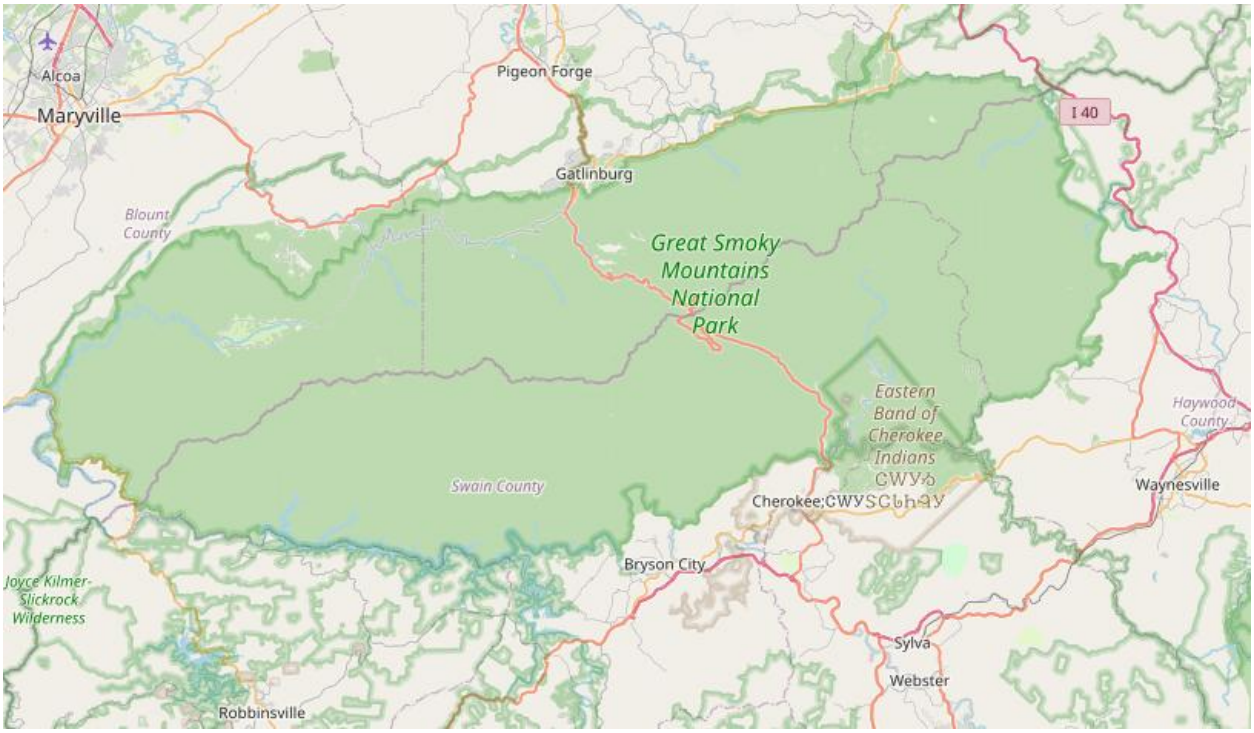

Figure 6. Great Smoky Mountains National Park. Adapted from: OpenStreetMap contributors

Visitor-involvement mechanisms

Public and virtual workshops for visitor-use planning

During the "Visitor Experience Stewardship Outreach" (NPS, 2024) process, the park held a series of eight public and virtual workshops with visitors, volunteers, partner organisations, and gateway communities. More than 200 people participated directly, and around 600 users from 28 states took part through online comments via the NPS Planning, Environment & Public Comment (PEPC) system. Workshop input is being used to inform visitor-flow strategies, trail upgrades, and communication measures.

Participants discussed issues such as:

- Trail congestion
- Parking shortages
- Crowding at popular viewpoints
- Desired experiences and visitor expectations

Partner and community collaboration framework

GSMNP maintains long-standing collaborations with organisations including *Friends of the Smokies, Discover Life in America, Smokies Life*, and multiple state/local tourism and community groups (NPS, 2025b). These partners help deliver:

- Visitor education
- Stewardship programmes
- Restoration projects
- Trail and facility improvements
- Volunteer mobilisation

Local tourism businesses, gateway communities, such as Gatlinburg, Pigeon Forge, Cherokee, and non-profit organizations act as intermediaries between visitors and park managers, sharing visitor feedback and helping shape park priorities.

Volunteer-based stewardship and citizen participation

GSMNP has one of the largest volunteer programmes in the U.S. national park system (NPS, 2025c). Visitors, hikers, families, retirees, and youth groups contribute through:

- Trail maintenance (e.g., clearing fallen trees, repairing erosion)
- Visitor support (providing information and safety guidance on busy trails)
- Citizen science (species observations, phenology monitoring)
- Litter removal and resource stewardship days
- Support for restoration and historic site maintenance

Groups such as *Friends of the Smokies* organise volunteer workdays, and volunteers directly report trail conditions and visitor-use issues back to park rangers – effectively becoming part of the visitor-experience management system.

Research-based stakeholder involvement

A long-standing tradition of academic research supports visitor involvement and stakeholder participation in the Smokies. These studies offer a structured way for visitor opinions to influence planning, especially in areas like trail management, parking policies, and zoning. Studies involving visitors, gateway communities, tourism operators, and local residents have examined::

- Perceptions of park management
- Visitor motivations
- Community–park relationships
- Acceptable levels of change in visitor experience

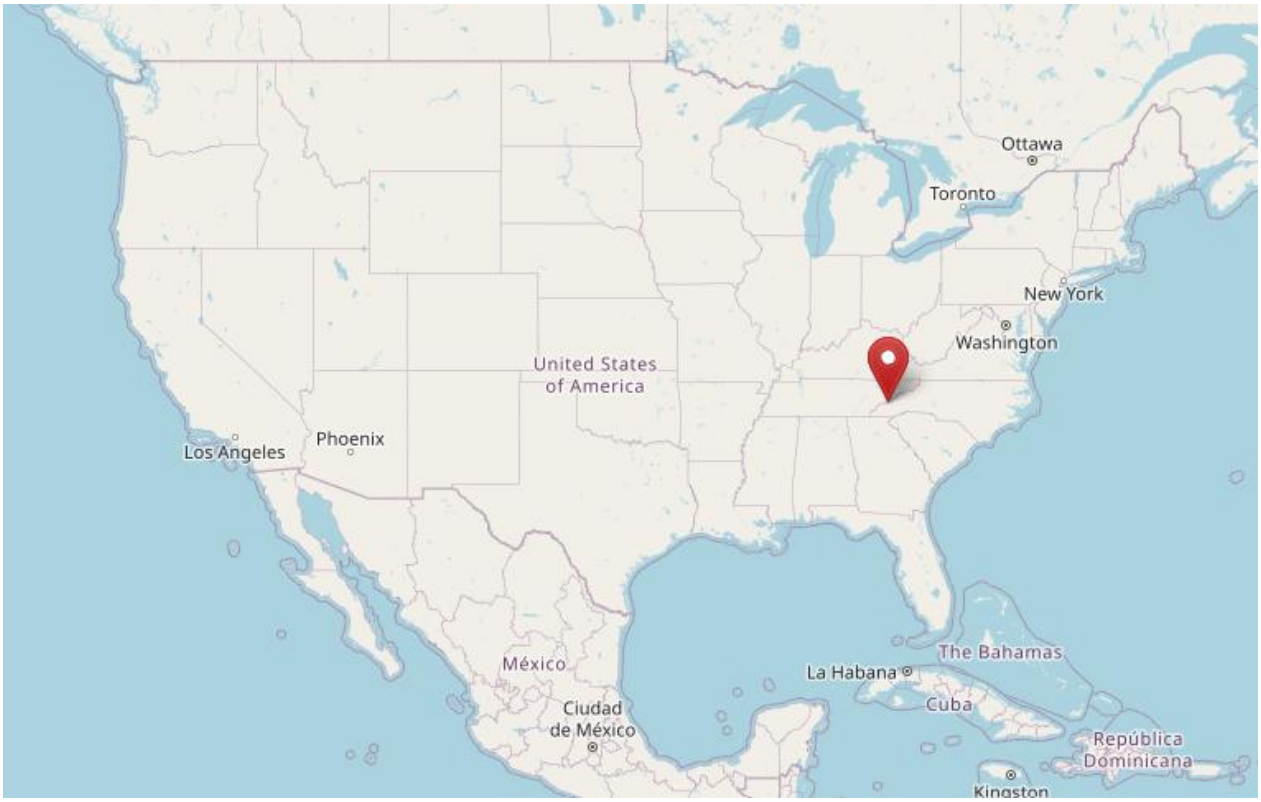

Figure 7. Location of the Great Smoky Mountains National Park. Adapted from: OpenStreetMap contributors

Case study 4: Plitvice Lakes National Park (Croatia)

Background

Plitvice Lakes National Park was established in 1949 and has been listed as a UNESCO World Heritage Site since 1979. It covers an area just under 300 km² of karst terrain (Vurnek et al., 2019). The park mainly features forest vegetation, with smaller sections of grasslands. Its most scenic feature, the lakes, occupy just under 1% of the total area. This lake system includes 16 named lakes and several smaller, unnamed ones that flow into each other (IUCN World Heritage Outlook, 2025).

The Plitvice Lakes National Park provides visitors with seven distinct routes to explore the lake system and four hiking trails. The park remains open to visitors throughout the year. The park remains open to visitors throughout the year.

As one of the most visited protected areas in Europe, the park sees about 1.5 million visits annually (with peak days of up to 12,000 visitors) from approximately 163 countries (Plitvice Lakes National Park, 2025a) and faces significant concentration of visitation in the lakes sector and boardwalk trails. Visitor-flow and ecological challenges in Plitvice include erosion of travertine deposits caused by foot traffic, overcrowding on boardwalks, high peak-hour arrivals, and the need to maintain the integrity of the sensitive ecosystem.

Figure 8. Plitvice Lakes National Park. Adapted from www.plitvice-lakes.info

Visitor-involvement mechanisms

Volunteer programme – "Green Guard"

Since 2016, Plitvice has offered a volunteer programme named "Green Guard" whereby local and international visitors apply to spend time, mostly during the summer months, living inside the park, assisting with visitor service, trail monitoring, visitor orientation, rule communication, and collaboration with rangers (Plitvice Lakes National Park, 2025b).

For example, volunteers receive free accommodation and meals, and their tasks include welcoming visitors at key trailheads, conducting visitor satisfaction surveys, reporting injuries/visitor incidents to rangers, and acting as "information ambassadors". By 2019, one cohort logged 4,274 volunteer hours. This mechanism gives visitors direct involvement in management-related tasks (though not decision-making) and strengthens their sense of stewardship and awareness of park rules.

Stakeholder input into the management plan and zoning

In response to increasing pressures, the park authority developed the Plitvice Lakes National Park Management Plan 2019-2028 (2019), which places strong emphasis on visitor management, involving extensive stakeholder participation: local communities, tourism boards, scientists, NGOs, and visitor groups were consulted. The plan supported a transition from pure ecological restoration to integrated visitor management and community involvement. Its structure identifies five themes, including "Visitor Management" and "Support to sustainable development of the local community." The plan envisions that data from visitors and the community will inform decisions on trail distribution, visitor access limits, and infrastructure upgrades.

Accessibility and inclusive visitor services

Plitvice Lakes National Park has progressively expanded its accessibility measures to ensure that visitors with disabilities, including mobility, sensory, and communication impairments, can meaningfully experience the park's natural values. Beyond physical adaptations such as accessible pathways, adapted boats, and reserved car-park spaces, the Park has recently strengthened communication accessibility through its involvement in the project "Nature for All in Sign Language" (Plitvice Lakes National Park, 2024)

Through this initiative, carried out in cooperation with the Croatian Association of the Deaf and Hard of Hearing, Plitvice aims to make interpretation and visitor information fully accessible to deaf and hard-of-hearing visitors. Development of accessible educational and interpretive materials in both Croatian Sign Language and International Sign, accompanied by Croatian and English subtitles. These videos are made available to visitors via QR codes placed on information boards, visitor-centre displays, and printed materials.

In addition, visitor-services staff receive training on interacting with deaf and hard-of-hearing visitors, improving their understanding of communication barriers and ensuring that frontline services demonstrate awareness, sensitivity, and inclusiveness.

These measures broaden the inclusivity of the Park's visitor-management system and expand the opportunities for persons with disabilities to participate in feedback processes, interpretive activities, and potentially volunteer programmes. It means that all visitors, regardless of ability, can engage with and contribute to the stewardship of this sensitive protected area.

Figure 9. Location of Plitvice Lakes National Park

Case study 5: Table Mountain National Park (South Africa)

Background

Table Mountain National Park (TMNP) is a 221 km² protected area stretching across the Cape Peninsula and embedded within the metropolitan area of Cape Town. The park includes world-renowned attractions such as Table Mountain, Cape Point, the Twelve Apostles, Boulders Beach, and Signal Hill. It lies within the Cape Floristic Region, a global biodiversity hotspot and UNESCO World Heritage Site.

TMNP is completely open access with no fencing for over 90% of its area, which results in exceptionally high levels of daily recreational use. An estimated 4 million visits occur annually, with intense use by local residents for walking, jogging, dog walking, climbing, paragliding, social gatherings, and scenic drives.

Urban pressures include invasive alien vegetation, wildfire risks, visitor safety concerns, multi-use trail conflicts, and crime-prevention challenges due to the park's proximity to residential areas. Community expectations toward the park are equally high: livelihood creation, access for disadvantaged communities, local recreation needs, tourism revenue, and heritage protection.

Visitor-Involvement Mechanisms

Structured stakeholder involvement and public participation

Recognising its urban context, South African National Parks (SANParks, 2015) developed a long-term participatory governance model for TMNP, emphasising continuous community and visitors dialogue, volunteer stewardship, and partnerships with local businesses, civic organisations, and recreation user groups. This visitor involvement framework ensures that visitors and user groups are not just informally consulted but integrated into decision-making cycles.

Actions include:

- Park forum meetings (standing advisory structure where community and user groups give feedback on visitor issues such as trail conflicts, safety, signage, and permits)
- Public participation process for the park management plan (public comment, open meetings, written submissions)
- Issue-based workshops focused on access, events, cycling, mountain safety, and zoning
- Reporting back to the community to demonstrate how their feedback directly shaped management decisions

Volunteer rangers and stewardship-based visitor support

TMNP runs a large volunteer programme providing a year-long curriculum including mountain safety skills, visitor engagement, environmental education, and first aid (SANParks, 2017). Their

daily observations directly inform safety responses, maintenance priorities, and visitor communication strategies. Graduates support rangers with:

- Visitor orientation at popular trailheads
- Safety oversight (helping lost or injured visitors)
- Reporting vegetation, trail or erosion problems
- Reinforcing responsible behaviour (e.g., fire safety, sticking to paths)

Community-based partnerships and local tourism cooperation

TMNP cooperates extensively with tourism businesses, community groups and adjacent neighbourhoods (SANParks, 2015). The park actively works with small tourism businesses operating near park gateways, local guiding and community-based tourism enterprises, environmental restoration teams made up of community members (e.g., Expanded Public Works Programme), and outreach to disadvantaged communities to increase equitable access.

Recreational user-group forums (hikers, climbers, cyclists)

TMNP engages directly with user group associations, such as hiking clubs, mountain biking groups, climbing/bouldering associations, and paragliding groups. These groups participate in formal dialogue on multi-use trail zoning, safety and code of conduct guidelines, signage improvements, or shared use of sensitive areas. This is a strong example of operational-level visitor involvement through organised user groups.

Youth, schools, and accessibility programmes

TMNP implements multiple outreach and inclusion projects that target young visitors or historically excluded communities (Dube & Muresherwa, 2019). These programmes include environmental education excursions for schools, accessibility-focused visits facilitated by NGOs, or clean-up days and restoration events involving youth groups

Visitor-use monitoring with community and volunteer input

TMNP conducts continuous monitoring of visitor numbers, trail use, incidents, and user satisfaction. Data comes from volunteer ranger reports, observations from user groups, public submissions, community feedback meetings, or on-site engagement with visitors. This monitoring is integrated into broader SANParks policy and adaptive management processes. Gathered insights influence trail repairs, closures during high fire-risk periods, sign redesign, and safety initiatives.

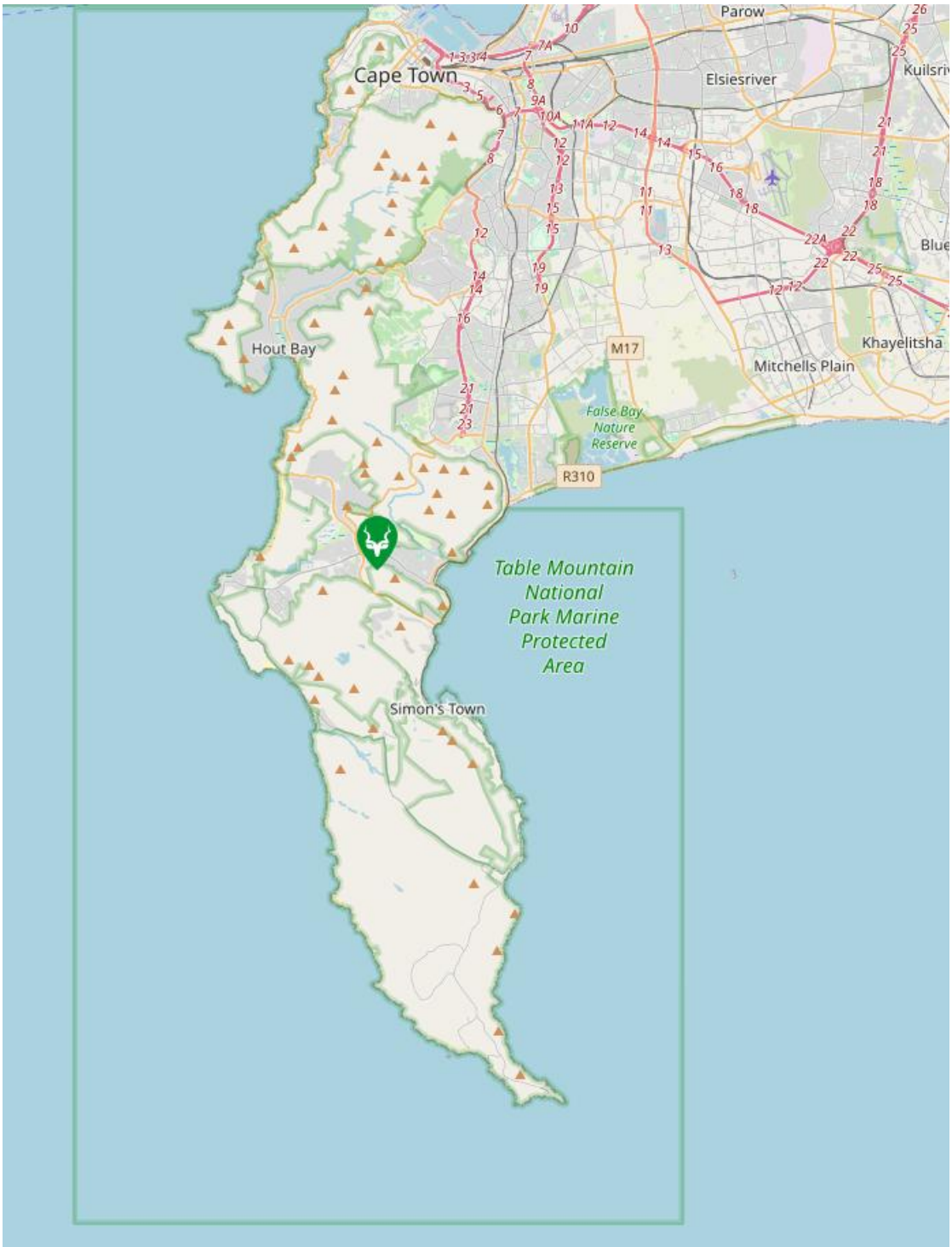

Figure 10. Table Mountain National Park, South Africa. Source: www.sanparks.org

6. FINAL REMARKS

This roadmap has outlined a structured and practical approach to involving visitors, including people with disabilities, in the indirect management of protected areas. The guidance presented here emphasizes that visitor involvement is most effective when it is planned systematically, integrated into everyday management processes, and supported by clear internal roles, accessible communication, and long-term partnerships.

Visitors bring valuable observations, lived experience, and diverse perspectives that can complement professional expertise. Their contributions help identify emerging issues, improve accessibility, strengthen compliance with regulations, and support adaptive management. When engagement is inclusive and transparent, visitors are more likely to understand management decisions, participate constructively, and act as long-term stewards of natural and cultural heritage.

For practitioners, the *Visitor involvement cycle*, together with the tools and checklists provided in this roadmap, offers a practical foundation for designing, implementing, and evaluating involvement processes. The roadmap also highlights the importance of organizational readiness, accessible formats, targeted outreach to underrepresented groups, and continuous monitoring of participation patterns and outcomes. These elements ensure that engagement remains fair, effective, and aligned with protected area objectives.

The case studies demonstrate that visitor involvement has tangible positive impacts on conservation, visitor experience, and public trust when supported by consistent communication and strong partnerships. Protected areas that adopt these principles can build more resilient engagement systems, better anticipate visitor needs, and integrate diverse insights into planning and daily operations.

Looking ahead, protected areas are encouraged to strengthen staff capacity, regularly review accessibility and engagement practices, and embed inclusive involvement into long-term management frameworks. By maintaining this commitment, managers can ensure that visitor involvement becomes an established, sustainable, and valued component of protected area governance, supporting protected areas in making informed, inclusive, and effective decisions that strengthen both conservation outcomes and the visitor experience.

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